

Male.—Length 13·8 mm. ; wing 12·8 mm.

Rostrum and palpi very small, brown. Antennæ short, scape light yellow, flagellum dark brown, clothed with moderately long hairs. Head brownish orange, on the vertical tubercle becoming clearer orange; the tubercle only moderately prominent, the anterior end shallowly notched.

Mesonotum shiny brownish yellow, the lateral margin of the præscutum darker brown. Pleura yellowish brown. Halteres brown, the knobs dark brown. Legs with the coxæ and trochanters shiny yellowish brown; femora black, the bases conspicuously yellowish, this somewhat broadest on the posterior legs; tibiæ black, the extreme bases narrowly and very indistinctly obscure yellow; tarsi black. Wings broad, strongly saturated with light greyish brown; cell *Sc* and a broad line behind vein *Cu* light yellow; stigma sub-circular, greyish brown; conspicuous darker brown spots, arranged as follows: at arculus; at origin of *Rs*; at *Sc*₂; at ends of veins *R*₂ and *R*₃; along the cord and outer end of cell 1st *M*₂; veins obscure yellow, darker in the infuscated areas; each vein is very narrowly seamed with yellow; macrotrichia confined to the distal ends of the subcostal and radial veins, except *R* which bears them for its entire length. Venation: *Sc*₂ a short distance from the tip of *Sc*₁; *Rs* angulated and spurred at origin; *R*₂₊₃ a little longer than the basal deflection of *Cu*₁; cell *M*₁ lacking; *Cu*₂ and the deflection of *Cu*₁ subequal, the latter about one-half its length beyond the fork of *M*.

Abdominal tergites brownish yellow, the sternites brighter. Hypopygium small.

Hab. West Africa.

Holotype, ♂, Efulan, Cameroun, May 6, 1920 (*J. A. Reis*).

“ Found on a swamp plant.”

XXXVII.—*Notes on various African and Asiatic Species of Lainus, Guérin, with an Account of their accessory ♂-characters [Coleoptera].* By G. C. CHAMPION, F.Z.S.

[Plate VIII.]

THIS paper is in continuation of one of the allied genus *Hapalochrus* published in the last volume of this Magazine, and it contains an account of all the species of *Lainus* represented in the British Museum, in the Hope collection

at Oxford, and in the collection of Mr. H. E. Andrewes. Certain African forms referred to the last-named genus by various authors were noticed in my previous communication, and placed under a new generic name, *Heterolaius*, op. cit., p. 179. Of the 30 species here enumerated, three only are African, the others Asiatic. No *Laius*, as restricted by me, has been seen from Central, West, or S. Africa, the recorded forms from the Congo and other tropical regions probably all belonging to *Heterolaius*. These insects have the anterior tarsi 5-jointed and simple in the two sexes. The antennæ (which are treated as 10-jointed) of the males are formed very much as in the American genus *Collops**, the second joint being usually enormously dilated, often concave and ear-like, and in some species bearing a long slender appendage. A large number of Australian *Laius* have been described by Lea and other writers, but very few of them seem to be represented in the British Museum. The type (♀), *L. cyaneus*, Guér. (*heterocerus*, Boisd.), is unknown to me. A drawing of a portion of the ♂ antenna of all the species represented by that sex in the material before me is appended: four of these antennæ have been figured by various writers, but they are included here for comparison.

LAIUS.

Laius, Guérin, Voyage 'Coquille,' Zool. ii. p. 78 (1830) (♀); Erichson, Entomographien, p. 62 (1840) (♂ ♀); Abeille de Perrin, Ann. Soc. Ent. Fr. 1891, p. 208 (♂ ♀) [type *L. cyaneus*, Guér., New Guinea]; nec Motsch., 1859.

Megadeuterus, Westwood, Trans. Linn. Soc. London, xvi. p. 678 (1833) (♀) [type *Paussus flavicornis*, F., Java].

Intybia, Pascoe, Journ. Ent. ii. p. 448 (1866) (♀) [type *I. guttata*, Pasc., Batchiau].

Amanicollops, Pic, L'Echange, xxiv. p. 25 (1908) (♂) [type *A. obscurus*, Pic, Amani, E. Africa].

Key to the Species of Laius.

- A. Anterior tibiæ of ♂ thickened basally; upper surface metallic; body and legs black. [LAIUS, Guér.] Species 1-3.
 B. Anterior tibiæ of ♂ simple.
 a. Head of ♂ not dentate.
 a¹. Elytra metallic; upper surface shining.
 a². Head and legs black, prothorax testaceous. Species 4.
 b². Head and prothorax (except on disc) testaceous, legs black. Species 5.
 c². Head, prothorax, and legs (in part or wholly) testaceous Species 6.

* Cf. Champion, Trans. Ent. Soc. Lond. 1914, pl. ii.

- b*¹. Elytra black or metallic, conjointly unifasciate ; upper surface shining.
*d*². Legs black Species 7, 8.
*e*². Legs partly or wholly testaceous Species 9-13.
*c*¹. Elytra interruptedly unifasciate ; upper surface black, dull, elytra metallic, body black Species 14.
*d*¹. Elytra conjointly or interruptedly bifasciate, the fasciæ more or less connected along the suture, the rest of their surface metallic.
*f*². Upper surface dull or opaque, black ; elytra coarsely punctured Species 15, 16.
*g*². Upper surface shining ; elytra (except in *L. raffrayi*) more finely punctured.
*a*³. Prothorax black, the red anterior margin excepted Species 17.
*b*³. Prothorax red or testaceous, the disc sometimes black Species 18-23.
*e*¹. Elytra albo- or testaceo-maculate.
*h*². Upper surface shining ; legs slender Species 24, 25.
*i*². Upper surface dull or opaque ; legs stouter, tarsi short [INTYBIA, Pasc.] Species 26-29.
b. Head of ♂ bidentate and transversely carinate ; upper surface opaque, metallic ; legs rather short and stout Species 30.

1. *Laius velutinus*.

- ♀. *Collops velutinus*, Gerst. in V. d. Decken's Reisen, iii. 2, p. 311 (1873).
Hapalochrus (Collops) velutinus, Fairm. Ann. Soc. Ent. Fr. 1887, p. 159.
Laius velutinus, Champ. Ann. & Mag. Nat. Hist. (9) vi. p. 179 (1920).

♂. Antennal joint 1 long, stout, compressed, curved, hollowed near the apex within ; 2 extremely broad, transverse, concave, ear-shaped, narrowly cleft on the inner margin, latter appearing toothed at the base (Pl. VIII. fig. 1) ; 3-10 short and rather stout. Anterior femora thickened, sulcate at the apex beneath ; anterior tibiæ swollen near the base and narrowed thence to the tip, the base itself excised and sulcate within.

♀. Antennal joints 1 and 2 moderately thickened, 1 much longer than 2.

Hab. E. AFRICA, Zanzibar Coast (*type of Gerstaecker* : ♀), Lourenço Marques (*J. G. Baldwin, in Mus. Brit.* : ♂ ♀).

A long series, including nine males, are provisionally referred to *L. velutinus*, which is based upon the ♀ only. A bluish-green or violaceous insect nearly related to *L. tibialis*, Gahan, and *L. flavicornis*, F., differing from both of them in the form of the basal joints of the ♂ antenna, and also in wanting the oblong testaceous callosity at the

base of the anterior tibiæ in this sex. One of the specimens received from Mr. Baldwin is labelled: "called by the natives 'Bange.' Supposed to cause sores." *Amanicollops obscurus*, Pic, may be a variety of this species.

2. *Laius flavicornis*.

Paussus flavicornis, Fabr. Syst. Eleuth. ii. p. 75 (1801).

Megaleuterus flavicornis, Westw. Trans. Linn. Soc. London, xvi. p. 678 (1833).

Laius flavicornis, Lacord. Gen. Coleopt. iv. p. 385, nota (1857).

♂. Antennal joint 1 long, broadly widened outwards, sinuately curved, deeply hollowed externally, and furnished with a small, dentiform tuft of hairs at the outer apical angle; 2 extremely broad, transverse, ear-shaped, the apical margin raised and subtruncate (Pl. VIII. fig. 2); 3-9 short, rather stout. Anterior femora thickened, obliquely grooved at the apex beneath; anterior tibiæ much swollen near the base, and narrowed thence to the tip, the base itself excised and sulcate within (Pl. VIII. fig. 2 a).

♀. Antennal joints 1 and 2 moderately stout, 2 about half the length of 1.

Hab. JAVA (*type of Fabricius*); LARAT (*F. Muir*); Key Is. (*Mus. Brit.*); BORNEO (*Mus. Brit.*), Lundu, Sarawak (*G. E. Bryant*: 8. i. 1914), Sarawak (*A. R. Wallace, in Mus. Oxon.*); CHINA (*Mus. Brit.*).

Seven ♂♂ and six ♀♀ are referred to *L. flavicornis*, F., which would appear to be a widely-distributed coast form in the Malay region. A robust, rather shining, cinereopubescent insect, nigro-cæruleous or violaceous in colour, with the antennæ (the testaceous joints 1 and 2 excepted) and legs black. A ♂ found by Mr. G. E. Bryant at Port Darwin, N.W. Australia, in March 1909, may belong here. Numerous extremely closely allied Australian forms have been described. According to Mr. Bryant, these insects are found on the sea-shore, at or below high-water mark, where they may be seen running about in sunny weather.

3. *Laius tibialis*.

Laius tibialis, Gahan, Monogr. Christmas Isl. p. 102, pl. 10, fig. 4 (antenna of ♂) (1900).

Hab. CHRISTMAS ISLAND (Indian Ocean).

Separable from the insects here identified as *L. flavicornis* and *L. velutinus* by the opaque upper surface, the relatively broader prothorax, and the ♂-characters, which are described

at length by Dr. Gahan. The artist, however, has drawn a male with three stout basal joints to the antennæ, the short first joint being imaginary (see Pl. VIII. fig. 3).

4. *Laius bulbifer*, sp. n.

♀. Moderately elongate, widened posteriorly, finely pubescent, shining; black, the antennal joints 1-3, the prothorax, the anterior legs (the femora in great part excepted), and the extreme bases of the intermediate and posterior tibiæ, testaceous or rufo-testaceous, the elytra cyaneous; the head and prothorax very sparsely (the sides of the latter closely), minutely, and the elytra densely, rather strongly, punctured, the elytra a little smoother at the tip. Head barely as wide as the prothorax; eyes rather small, prominent; antennæ with joints 1 and 2 moderately thickened, 1 curved, much longer than 2, 2 more than twice the length of 3, 3-9 a little longer than broad. Prothorax transverse, convex, rounded at the sides, sinuously narrowed towards the base, the transverse basal groove deep. Elytra moderately long, much widened posteriorly, rounded at the apex, depressed near the suture anteriorly.

♂. Antennal joint 1 testaceous on the inner and outer aspects, curved, broadly lamellate (as seen in profile); 2 black, extremely large and stout, broadly oval, excavate above, and bearing two long, slender, contiguous appendages near the base within (Pl. VIII. fig. 4).

Length $3\frac{1}{2}$ mm. (♂ ♀.)

Hab. INDIA, Chaubattia, Almora District, alt. 6-7000 ft. (*S. R. Archer*: ♂), W. Almora in Kumaon (*H. G. C.*: ♀).

A male received by the British Museum in 1920, a female captured by my eldest son, probably in 1919, the two localities being not very far distant in the Himalaya.

5. *Laius denticornis*, sp. n.

♂. Moderately elongate, somewhat convex, widened posteriorly, shining, finely cinereo-pubescent; black, the antennal joints 1 and 2, and the head and prothorax (an infusate patch on the disc of the latter excepted), testaceous, the elytra obscure bluish-green; the head and prothorax minutely (the sides of the latter rugulose), and the elytra (except at the base, which is smoother) densely and somewhat coarsely, punctured. Head about as broad as the prothorax, grooved in the middle between the eyes, the latter prominent; antennal joint 1 stout, curved, subdentate at the outer apical angle, 2 extremely large, oblong,

somewhat concave, produced inwards into a sharp curved tooth at the base, and subangulate at the outer apical angle (Pl. VIII. fig. 5), 3-10 longer than broad. Prothorax convex, scarcely as long as broad, rounded at the sides anteriorly and strongly constricted before the base, the basal portion narrow, the arcuate basal groove rather deep. Elytra comparatively short, in the broadest part twice the width of the prothorax, rounded at the tip.

Length $2\frac{1}{2}$ mm.

Hab. INDIA, Nilgiri Hills (*H. E. Andrewes*).

One male. Separable from *L. testaceiceps*, Pic (1912), and other Indian forms with wholly metallic elytra, by the black legs and the peculiarly-shaped second antennal joint (σ), which is produced inwards into a curved tooth at the base, leaving the short connecting-node exposed. This structure is not unlike that of *L. jucundus*, σ , as figured by Bourgeois and myself.

6. *Laius nodifrons*, sp. n.

♀ . Short, rather convex, much widened posteriorly, shining, somewhat thickly cinereo-pubescent; head (the eyes excepted), palpi, antennae, prothorax, and legs (the partly black intermediate and posterior femora excepted) testaceous or rufo-testaceous, the scutellum and under surface black, the elytra blue; the head and prothorax closely (the disc of the latter very sparsely), minutely, the elytra densely, rather strongly, punctured. Head not so wide as the prothorax, longitudinally impressed in the middle between the eyes, the latter not prominent; antennae with joints 1 and 2 thickened, 1 curved, much longer than 2, 3-9 short. Prothorax transverse, convex, rounded at the sides, much narrowed behind, the sides sinuous towards the base. Elytra short, dilated and convex posteriorly, rounded at the tip. Wings ample.

♂ . Head as broad as the prothorax, depressed on each side (the eyes thus appearing prominent and subpedunculate) and deeply sulcate down the middle anteriorly, the groove bordered laterally by a tumid space; antennal joint 1 stout, curved, subangulate at the outer apical angle, 2 extremely large, broad, somewhat trumpet-shaped, the oblique fold near the base bearing a very slender, curled appendage at the inner basal angle (Pl. VIII. fig. 6), 3-9 scarcely longer than broad.

Length 3-3 $\frac{1}{2}$ mm. (σ ♀ .)

Hab. INDIA, W. Almora and Ranikhet Divisions of Kumaon (*H. G. C.*).

Fourteen specimens, including five males. An insect easily recognized in the ♂-sex by the laterally depressed, mesially sulcate, binodose head, the subpedunculate eyes, the very large, somewhat trumpet-shaped, appendiculate second antennal joint, and the rufo-testaceous legs (the femora in part excepted), head, antennæ, and prothorax. The ♀ is separable from the same sex of *L. bulbifer* by these colour-characters, the shorter antennæ, the closely punctured head, etc. *L. cæruleipennis*, Pic (1914), from Kulu, and *L. testaceiceps*, Pic (1912), from "Indes," are similarly-coloured insects: the former is larger, and differs in the ♂-characters, and the latter is smaller, than *L. nodifrons*, of which there is a ♀ from Mysore in the Oxford Museum and another from Colombo in the British Museum.

7. *Laius luteofasciatus*.

Laius luteofasciatus, Pic, L'Echange, xxiv. p. 96 (1908).

♀. Elongate, rather narrow, widened posteriorly, very shining, sparsely pilose; nigro-cyaneous, the antennæ (the testaceous joints 1-4 excepted) and legs black, the elytra violaceous, with a rather broad, common, luteous ante-median fascia, which is widened outwards and at the suture. Head small, sulcate, finely punctate; antennæ long, joints 1 and 2 thickened, elongate, 1 curved, 2 almost straight, 3-9 longer than broad, gradually increasing in length. Prothorax wider than the head, nearly as long as broad, convex, strongly constricted towards the base; densely punctured along the sides and very sparsely so on the disc. Elytra long, much wider than the prothorax, rounded at the apex, closely, coarsely punctate.

Length $3\frac{3}{4}$ mm.

Hab. BURMA, Pegu (*type of Pic*).

A specimen from the Entomological Club collection, acquired by the Museum in 1844, is doubtless referable to the imperfectly described *L. luteofasciatus*, Pic, the type of which must also be ♀. The insect from which the above description is taken is unfortunately without locality-label. *L. annamitus*, Pic (1908), and *L. fasciatus*, Bourg. (1890), are allied forms.

8. *Laius lunatus*, sp. n.

♀. Moderately elongate, rather broad, widened posteriorly, shining, thickly clothed with long, erect, blackish hairs intermixed with a scattered greyish pubescence; black, the

two basal joints of the antennæ partly testaceous, the elytra nigro-cyaneous, with a rather broad, common, angulate, flavous or rufescent, submedian fascia; the head and prothorax very sparsely, minutely punctate, the latter almost smooth on the disc, the elytra with intermixed coarse and fine punctures. Head scarcely as wide as the prothorax, impressed in the middle between the eyes, the latter rather prominent; antennæ with joints 1 and 2 moderately thickened, long, subequal in length, 1 curved, 3-9 longer than broad. Prothorax convex, broader than long, rounded at the sides, constricted posteriorly, deeply, transversely excavate before the base. Elytra rather elongate, broad, in the widest part about twice the breadth of the prothorax, bluntly rounded at the tip.

♂. Antennal joints 1 and 2 almost wholly, and the anterior femora in part, testaceous; antennal joint 1 broadly widened, curved, triangular, 2 extremely large, concave, broadly lunate, rounded distally and bicuspid at the inner angle, each point bearing a small tuft of long curled hairs (Pl. VIII. fig. 7), 3-9 longer than broad.

Length 4-4 $\frac{3}{4}$ mm. (♂ ♀.)

Hab. INDIA, Ranikhet and Central Almora Divisions of Kumaon (*H. G. C.*: vi. 1920).

Described from a series of thirty females and four males, some of which were found on a species of *Polygonum*. This species may be known by the almost smooth, shining, black head and prothorax, and the nigro-cyaneous, rufo- or flavo-fasciate elytra, the latter with intermixed coarse and fine punctures; the ♂ with an enormous, concave, luniform, bicuspid second joint to the antennæ. *L. fasciatus*, Bourg. (1890), from Cambodia, is doubtless an allied form.

9. *Laius taprobanus*, sp. n.

♀. Moderately elongate, rather convex, widened posteriorly, shining, clothed with fine greyish pubescence intermixed with longer, erect, hairs; black, the antennal joints 1-3 (1 sometimes with a dark line above), a common ante-median fascia on the elytra (widened outwards and also at the suture), and the ventral surface in part, testaceous or luteous, the rest of the elytra nigro-cyaneous. Head small, closely punctulate, sulcate in the middle between the eyes; antennæ moderately long, joints 1 and 2 elongate, rather stout, 2 a little shorter than 1, 4-11 much more slender, shorter, subfiliform. Prothorax very little wider than the head, about as long as broad, constricted behind; smooth

on the disc, densely, rugosely punctate at the sides, the basal depression deep. Elytra moderately elongate, much broader than the prothorax, and nearly twice its width at the apical third; closely, uniformly, rather coarsely punctate.

Length $3\frac{1}{4}$ – $3\frac{1}{2}$ mm.

Hab. CEYLON, Bogawantalawa, alt. 4900–5200 ft. (*G. Lewis*: 20 and 22. ii. 1882).

Three females. Smaller, narrower, and more convex than the similarly-coloured *L. lunatus* (♀), the basal joints of the antennæ testaceous; the head and prothorax not so broad, the latter densely rugulose at the sides; the elytra closely, uniformly, rather coarsely punctate. The allied *L. indianus*, Pic (1913), type ♀, is said to have the elytra black, with a broad yellow median fascia, and the tibiæ testaceous.

10. *Laius boysi*, sp. n.

♀. Elongate, narrow, shining, pubescent; black with a greenish lustre, the elytra violaceous, a common, broad, angulate fascia before the middle, and the antennal joints 1 and 2, the tibiæ and tarsi in part or entirely, and abdomen, testaceous; the head minutely punctate, the prothorax closely punctured at the sides and smooth on the disc, the elytra also closely, finely punctate. Head impressed in the middle between the eyes, about as broad as the prothorax; antennal joints 1 and 2 long, moderately thickened, 1 much longer than 2, 3–10 rather long and slender. Prothorax broader than long, convex, subcordate, strongly constricted before the base, the transverse basal excavation deep. Elytra long, gradually widened from the base, rounded at the tip.

Length 3 mm.

Hab. E. INDIA (*Capt. Boys, in Mus. Oxon.*).

One specimen, received many years ago by the Hope Museum at Oxford, no nearer locality being given on the label than the one quoted. Narrower than Himalayan *L. lunatus*, the sides of the prothorax closely punctulate, the elytral puncturing uniform, close, and rather fine, the tibiæ and tarsi in part or entirely testaceous, the antennæ more slender. Captain Boys collected in the Himalaya, and the insect may be from that region. *L. indianus*, Pic (1913), is similarly fasciate, but the elytra are described as black and somewhat strongly punctured, and nothing is said of the closely punctate sides of the prothorax.

11. *Laius kiesenwetteri*.

♂. *Laius flavicornis*, Kies. Berl. ent. Zeitschr. 1874, p. 283 (nec Fabr.).
Laius kiesenwetteri, Lewis, Ann. & Mag. Nat. Hist. (6) xvi. p. 116
 (1895).

♂. Head with a large triangular whitish patch in front; antennal joints 1 and 2 long and broad, 1 curved, abruptly widened from near the base, hollowed externally, 2 with a longitudinal, oval excavation towards the apex externally and a straight, truncated appendage at the base (Pl. VIII. fig. 8), 3-9 rather slender, longer than broad.

♀. Head wholly black; antennal joints 1 and 2 moderately thickened, 1 nearly twice as long as 2, 2 at least twice the length of 3.

Var. The broad pallid elytral fascia with a reddish-brown narrower band across the middle.

♀. *Laius histrio*, Kies. loc. cit.

Hab. JAPAN, Kiushiu and Nipon; CHINA, Shanghai, Chusan Is., K. lan Pt., Pwanche Id. (*J. J. Walker*).

Not recorded hitherto from China, where Commander Walker found it not uncommonly in 1892, males preponderating in the series before me. The broad whitish elytral fascia varies in development, sometimes not quite reaching the suture, and it occasionally has a reddish or brown band across the middle, a ♂ from Pwanche Id. showing this intermediate fascia very clearly. The femora and tibiae are sometimes partly infuscate.

12. *Laius pelegriini*.

? *Laius pelegriini*, Pic, L'Echange, xxvi p. 62 (1910).

♀. Elongate, rather narrow, shining, sparsely pubescent and with longer erect hairs intermixed; black, the antennal joints 1-3, the elytra with a very broad common fascia below the base (extending forwards beneath the humeri and backwards along the suture and outer margin), and the legs testaceous; the head sparsely, minutely, the sides of the prothorax closely, the elytra more distinctly, punctured, the prothorax smooth on the disc. Head impressed in the middle between the eyes; antennal joints 1 and 2 long, thickened, 2 nearly as long as 1. Prothorax convex, subcordate, deeply, transversely excavate before the base. Elytra long, dilated beyond the middle, rounded at the tip.

Length $3\frac{1}{2}$ mm.

Hab. JAPAN, Yedo (*Pelegrin*, in coll. Pic: types, ♂ ♀), Nowata (*G. Lewis*).

A female from Nowata seems to belong to this species, but the surface is not metallic as described by Pic. The second antennal joint of ♂ is described by him as "très grand et long, en forme de demi-croissant élargi, creusé en dehors, épineux au sommet interne." The rugose sides of the prothorax are not mentioned in the diagnosis.

13. *Laius niponicus*.

Laius niponicus, Lewis, Ann. & Mag. Nat. Hist. (6) xvi. p. 116, pl. vi. fig. 8 (♂) (1895).

♂. Antennal joint 1 long, curved, broad, gradually widened outwards, 2 extremely large, broad, obliquely transverse, somewhat spoon-shaped, without basal appendage (Pl. VIII. fig. 9), 3-9 short.

♀. Antennæ shorter, joints 1 and 2 moderately thickened, 2 much longer than 1.

Hab. JAPAN, Hakodate and Kobé.

Separable from *L. kiesenwetteri* by the wholly black head in both sexes, the closely punctured sides of the prothorax, the narrower testaceous elytral fascia, and the very differently-shaped second antennal joint in ♂.

14. *Laius sinensis*.

♂. *Laius sinensis*, Pic, L'Echange, xxvi. p. 87 (1910).

♂. Antennal joint 1 curved, much widened outwards, 2 extremely large, broad, somewhat ear-shaped, deeply excavate in its basal half (Pl. VIII. fig. 10), 3-9 short.

♀. Antennal joints 1 and 2 moderately thickened, subequal in length.

Hab. CHINA, Hong Kong (*type of Pic: Mus. Brit.*), Chusan Is., Ta-maon Id. (*J. J. Walker*); PENANG (*G. E. Bryant*, 28. x. 1913).

A small, opaque, hairy, rugulose, nigro-violaceous insect, the elytra with an interrupted luteous ante-median fascia. It is a close ally to *L. plagiatus*, Walk.

15. *Laius plagiatus*.

♀. *Malachius* (?) *plagiatus*, Walk. Ann. & Mag. Nat. Hist. (3) ii. p. 283 (1858).

♂. *Laius plagiatus*, Bourg. Ann. Soc. Ent. Fr. 1905, pp. 130, 131.

♂. Antennal joint 1 curved, abruptly widened from near the base (oblong and obliquely subtruncate at the apex and near the base, when viewed in profile); 2 extremely large,

transverse, obliquely plicate, the external portion with a large deep fovea, the inner portion concave and with the raised curved edge obliquely truncate near the base, as seen in profile (Pl. VIII. fig. 11).

Var. The subapical elytral fascia partly white.

♀. *Laius kanarensis*, Pic, Mélanges exot.-entom. xxv. p. 4. (1917).

Hab. CEYLON (type of Walker, in *Mus. Brit.*; coll. Andrewes, ex Colombo Museum), Plains and Khandulla (ex coll. H. E. Cox, in *Mus. Oxon.*: typical form and var.); INDIA, Calcutta (*Mus. Brit.*), Nilgiri Hills [typical form and var.], S. Mysore, Igatpuri [var.], Lamta, Balaghat District (coll. Andrewes), Kanara (type of Pic), Gopaldhara (coll. Andrewes).

A widely distributed insect, of which long series taken at Khandulla and the Nilgiri Hills have been examined. The basal joint of the ♂-antenna has a very different appearance, when viewed in profile, and it is possible that *L. variolosus*, Bourg., also from Ceylon, may prove to be inseparable from *L. plagiatus*; the second antennal joint (♂) of the former, however, is described as "valde inflato, fere globoso, intus auriculato." These insects are black and pilose, and have the elytra very coarsely punctured, nigro-cyaneous or nigro-violaceous in colour, with two transverse rufescent or testaceous fasciæ, which are connected along the suture.

16. *Laius foveicornis*.

? *Laius foveicornis*, Pic, Mélanges exot.-entom. xxv. p. 5 (♂ ♀) (1915).

♂. Very like *L. plagiatus*, Walk., but differing as follows: head broader, the eyes larger; antennal joint 2 extremely large, transverse, less produced within (thus appearing to be articulated to the preceding joint near the inner basal angle), grooved and foveate near the apex, the inner margin simply rounded, the fovea on the outer portion much smaller than in *L. plagiatus* (Pl. VIII. fig. 12); elytra very coarsely punctured.

♀. Elytra a little shorter, more inflated posteriorly.

Hab. INDIA (*Mus. Brit.*), Himalaya (types of Pic), River Sarda Gorge [xii. 1918], W. Almora Division of Kumaon, and Chakrata, Jaunsar (*H. G. Champion*).

A male and two females found in the Himalaya by my eldest son may belong here. The definition of the second (third of Pic) antennal joint of ♂—"transverse et supra foveolato"—would apply equally well to *L. plagiatus*, with which the present species is compared by the author.

17. *Laius semilimbatus*.

♂. ? *Laius semilimbatus*, Pic, Mélanges exot.-entom. xviii. p. 14 (1916).

♀. Elongate, rather narrow, slightly widened posteriorly, shining, clothed with fine, decumbent, pallid pubescence intermixed with long, erect hairs; black, bluish-black, or nigro-violaceous, the antennal joints 1 and 2 in part testaceous, the prothorax with the anterior margin rather broadly, and the elytra with a common, anteriorly-excised fascia before the middle and a narrow one near the apex, which are connected along the suture, rufous or testaceous (leaving a posteriorly triangulate basal space, the apex, and a broad oblique patch on each elytron, metallic or black); the head closely, very finely, the lateral portions of the prothorax densely, rugulose, and the disc of the latter sparsely, punctulate, the elytra somewhat densely and not very coarsely punctured. Head rather broad, impressed in the middle between the eyes, the latter prominent; antennæ long, joints 1 and 2 elongate, moderately thickened, subequal in length. Prothorax about as long as broad, convex, constricted and much narrowed towards the base, the disc excavate on each side anteriorly, the transverse basal depression deep. Elytra long, much wider than the prothorax.

♂. Antennal joint 1 very stout, curved, concave externally; 2 enormously large, concave, somewhat ear-shaped, truncatodilatate and furnished with a broad, curled, membranous appendage on its inner aspect (Pl. VIII. fig. 13); 3-10 moderately elongate.

Length $3\frac{1}{5}$ -4 mm. (♂ ♀.)

Hab. TONKIN [*type of Pic*], between Vientiane and Luang Prabang, Laos, Ban Saleun (*Salvaza*).

Found in abundance in each locality by Mr. R. V. de Salvaza at the end of 1919 and beginning of 1920, the long series sent by him to the British Museum including nine males. The elytral fasciæ vary in colour from bright red to pale testaceous. This species agrees with the diagnosis of *L. semilimbatus*, Pic, except as regards the sculpture of the prothorax, which is said to be "fere impunctato"; but it is possible that some mistake has been made in this respect. If a new specific name is required for the insect before me, *rufolimbatus* can be used for it.

18. *Laius raffrayi*.

? *Laius raffrayi*, Gorh. Ann. Mus. Genova, xviii. p. 597 (1883).

Hab. ABYSSINIA (*Mus. Genova*: type).

In the British Museum there is a ♀ from Abyssinia that may belong to the species. It resembles the Egyptian *L. venustus*, Er., but has very coarsely punctured elytra. The two elytral fasciæ are testaceous, connected along the suture, the anterior one broad. The specimen supposed by Gorham to be a ♂ is said to differ from the ♀ in having the second antennal joint much more recurved, guttiform, yellow, and shining.

L. abyssinicus, Pic (1917), type ♀, is described as having the prothorax black, except at the base and apex.

19. *Laius venustus*.

♂. *Laius venustus*, Er. Entomographien, p. 63 (1840)¹; Abeille de Perrin, Ann. Soc. Ent. Fr. 1891, p. 209, pl. vii. fig. 24 (♂ antenna)².
? *Malachius bifasciatus*, Cast. Hist. Nat. Ins. Coléopt. i. p. 280 (1840)³.

♂. Antennal joint 1 curved, compressed, stout; 2 extremely broad, concave, strongly transverse, somewhat malleiform (un peu en demi-lune, sec. Perrin) (Pl. VIII. fig. 14), 3 articulated to it at about the middle of the outer margin.

♀. Antennal joint 1 moderately thickened, 2 nearly as long as 1, slender.

Hab. EGYPT^{1,2} [*type*], Cairo (*F. C. Willcocks*, in *Mus. Brit.*), W. of Khartum near Mogram (*G. B. Longstaff*, *Mus. Oxon.*); ABYSSINIA² (*sec. Perrin*); ? SENEGAL³.

This species is very nearly related to the Indian *L. jucundus*, Bourg., and its allies. The legs vary in colour and the prothorax sometimes has a black patch on the disc. Found "on cotton," according to Mr. Willcocks. The ♂-antenna has been figured by Perrin, but a drawing of it, from a specimen in the Oxford Museum, is here given for comparison with an allied Indian insect.

20. *Laius malleifer*, sp. n.

♀. Elongate, narrow, widened posteriorly, shining, clothed with fine scattered pubescence intermixed with long, erect hairs; black, the antennal joints 1-3, the prothorax (a subquadrate black patch on the disc excepted), the tibiæ,

tarsi, and apices of the anterior femora testaceous or rufotestaceous, the elytra nigro-cyaneous or nigro-violaceous, each with two transverse whitish fasciæ—one below the base, broad, widened outwards, the other narrow, sinuate, before the apex, — which are usually connected by a narrow whitish or testaceous sutural streak; the head and prothorax very finely punctured, the latter almost smooth on the disc and rugulose at the sides, the elytra densely, rather coarsely punctate. Head nearly as wide as the prothorax, grooved in the middle between the eyes, the latter prominent; antennal joints 1 and 2 moderately thickened, elongate, subequal in length, 3–10 much longer than broad. Prothorax convex, longer than broad, constricted and much narrowed behind, compressed at the sides anteriorly, the transverse basal depression deep. Elytra rather elongate.

♂. Antennal joints 1 (the black upper edge excepted) and 2 testaceous; 1 curved, much widened outwards; 2 extremely stout, concave, transverse, curved externally, broadly malleiform (viewed along the longitudinal axis of the antenna), and furnished with a long, curled, slender appendage on its inner edge (Pl. VIII. fig. 15).

Length $2\frac{1}{2}$ –3 mm. (♂ ♀.)

Hab. INDIA, Gogra, Punjab (*ex coll. H. E. Andrewes*: ♂, type), “E. India” (*Hearsay and Capt. Boys, in Mus. Oxon.*: ♂ ♀).

Two males and six females. A form of the Egyptian *L. venustus*, Er., with a much broader, appendiculate, hammer-shaped second antennal joint in the ♂, the common triangular metallic basal patch on the elytra usually connected near the suture with the dark interrupted median fascia. Separable from *L. externenotatus*, Pic, by the very differently-shaped second antennal joint in ♂ and the broad whitish elytral fasciæ.

L. sikkimensis, Pic, and its var. *testaceilabris* (1914), said to be extremely near *L. jucundus*, Bourg., is probably a close ally of *L. malleifer*; it is described as having the second (third of Pic) antennal joint of ♂ very broad, subarcuated, and not dentated behind.

21. *Laius jucundus*.

Laius jucundus, Bourg. Compt. Rend. Soc. Ent. Belg. 1891, p. cxl (♂ ♀), fig. 1 (antenna of ♂).

Laius jucundus var. *maculithorax*, Pic, Le Nat. 1903, p. 81.

♂. Antennal joint 1 strongly curved, stout, somewhat

angulate at the outer apical angle; 2 very stout, elongate-oval, oblique, slightly hollowed above, produced into a sharp tooth towards the base within, the narrow constricted basal portion having the appearance of an additional joint (incorrectly shown as such by Bourgeois) (Pl. VIII. fig. 16).

Hab. BENGAL, Calcutta (*Mus. Brit.*), Kunbir Nowatoli (*types of Bourgeois*), Belgaum, Pusa, Kanara (*coll. Andrewes*), Bombay (*G. E. Bryant*), Assam, etc. (*Mus. Oxon.*), Shillong (*F. W. Champion*).

Apparently a less common insect in Southern India than *L. externenotatus*. The five females from Shillong agree with others of the same sex from Bengal, etc.

22. *Laius externenotatus*.

♀. ? *Laius externenotatus*, Pic, *Mélanges exot.-entom.* v. p. 5 (1913).

♀. Elongate, narrow, widened posteriorly, shining, clothed with scattered pubescence intermixed with long, erect hairs; black, the antennal joints 1-3, the prothorax (a large black patch on the disc excepted, this being rarely obsolete), the tarsi, and often the tibiae in part, testaceous or rufo-testaceous; the elytra nigro-cyanous or nigro-violaceous, each with an outwardly-widened transverse fascia or mark before the middle, a narrow transverse fascia on the disc before the apex, and the suture between them, these markings sometimes connected and the fasciae complete, whitish or testaceous, the sutural streak often rufescent; the head and prothorax finely, the latter with the disc very sparsely and the sides rugulosely, punctulate, the elytra densely punctured. Head about as wide as the prothorax; antennae with joints 1 and 2 moderately thickened, elongate, subequal in length. Prothorax convex, longer than broad, constricted and much narrowed behind, excavate at the sides anteriorly (the margins appearing sinuate as seen from above), the basal groove deep. Elytra much wider than the prothorax, rounded at the tip.

♂. Antennal joint 1 strongly curved, much widened outwards; 2 extremely large, oblong-oval, hollowed above, and more or less angulate and bearing a small, retractile, membranous appendage at the inner basal angle (Pl. VIII. fig. 17).

Length $2\frac{1}{2}$ - $3\frac{1}{2}$ mm. (♂ ♀.)

Hab. INDIA (*type of Pic*: ♀), S. India, Malabar (*Mus. Brit.*), Poonah (*G. E. Bryant*: v. 1908), Belgaum, Kanara, *Ann. & Mag. N. Hist.* Ser. 9. Vol. vii. 23

Nilgiri Hills, Madura (coll. Andrewes) ; CEYLON (ex Colombo Museum).

Pic's description, based upon the ♀ only, would apply almost equally well to two closely-allied Indian insects, which have a very differently-formed second antennal joint in ♂, this joint varying but little in shape in the numerous examples before me, it being always more or less angulate and apparently hooked at the inner basal angle in the present species. The name *externenotatus* is here selected for the common S. Indian *Laius* allied to *L. jucundus*, Bourg. The completely bifasciate forms must come very near *L. sikkimensis*, Pic (1914).

23. *Laius birmanicus*, sp. n.

♀. Elongate, narrow, slightly widened posteriorly, shining, clothed with scattered pubescence intermixed with long, erect hairs ; black, the antennal joints 1 and 2 in part or entirely, and the prothorax, testaceous, the elytra nigro-cyanaceous or nigro-violaceous, with a common angulate fascia below the base and a narrow one near the apex, which are connected along the suture, whitish or testaceous ; the head and prothorax finely, the latter with the sides rugulose and the disc very sparsely, punctulate, the elytra rather coarsely, closely punctured. Head about as broad as the prothorax, impressed in the middle between the eyes ; antennæ with joints 1 and 2 moderately thickened, elongate, subequal in length, 3-10 much longer than broad. Prothorax as long as broad, convex, constricted and much narrowed towards the base, excavate on each side anteriorly, and with a deep basal groove. Elytra long, rounded at the tip.

♂. Elytra subparallel ; antennal joint 1 strongly curved, much widened outwards, 2 extremely large, concave, obliquely subquadrate, the inner margin produced into a backwardly-curved, short, hook-like projection near the base (Pl. VIII. fig. 18).

Hab. BURMA (A. K. Weld Downing), Tharrawaddy, Pnomo (coll. H. E. Andrewes).

Two pairs. The description of the ♂ is taken from a perfect example captured by Mr. Downing ; the others are in bad condition. Near *L. amonus*, Bourg. (1891), from Cambodia, and *L. sikkimensis*, Pic (1914), from Sikkim : the former is said to have a subglobose 2nd joint to the antennæ in ♂ and the pallid posterior elytral fascia reduced to two small spots, and the latter to have the corresponding

antennal joint of the ♂ subarcuate and not dentate behind and hollowed in front.

Three ♀ ♀ from S. Mysore (*coll. Andrewes*) may belong here.

24. *Laius duplex*, sp. n.

♀. Elongate, somewhat robust, widened posteriorly, shining, very sparsely, finely pubescent, and also set with intermixed long erect hairs, those on the elytra arising from the coarser punctures; black, the antennal joints 1-3 (the base of 1 excepted), and in one specimen the extreme bases of the tibiæ and the tarsi in part, testaceous, the elytra with a broad, outwardly-widened fascia (interrupted at the suture) and a large transverse patch (not reaching the suture or outer margin) on the disc of each towards the apex whitish or brownish white; head and entire prothorax very sparsely, obsoletely punctulate, the convex portion of the latter almost smooth, the elytra finely punctulate between the scattered coarse punctures. Head feebly foveate between the eyes, the latter prominent; antennæ with joints 1 and 2 elongate, stout, 1 curved, 3-10 rather slender, all longer than broad. Prothorax about as long as broad, nearly as wide as the head, gibbous on the disc anteriorly and strongly constricted towards the base, the transverse basal sulcus long and deep. Elytra rather long, somewhat convex, rounded at the apex, gradually widening from the base. Legs long.

Length 3-3½ mm.

Hab. JAVA [type] and FORMOSA (*ex coll. Bowring*).

Two females, the Formosan locality requiring confirmation. A pilose, shining black insect, with two large, sharply-defined whitish fasciæ on each elytron, the elytra with a double system of puncturing, the prothorax gibbous and almost smooth. The elytral sculpture is different from that of *L. javanus*, Pic (1906), and the two recorded Formosan species, *L. latefasciatus* and *L. sexmaculatus*, Pic (1919), cannot be compared with *L. duplex*.

25. *Laius sexsignatus*, sp. n.

♀. Moderately elongate, narrow, very finely pubescent, shining; black, the antennæ (the fuscous inner edge of joint 1 and the terminal joints excepted), and the legs and abdomen in part, testaceous, the elytra each with three whitish spots—one, small, humeral, one, very large, below

the base (extending to the outer margin, but not quite reaching the suture), and one, large, transverse, distant from the suture, subapical; the elytra closely, minutely, the head and prothorax more sparsely, punctulate, the lateral portions of the prothorax dull and rugulose. Head subtriangular, a little wider than the prothorax, foveate in the middle between the eyes, the latter rather prominent; antennæ slender, joints 1 and 2 elongate and moderately thickened, 1 curved, 2 subcylindrical. Prothorax convex, barely as long as broad, subcordate, transversely excavate before the base. Elytra rather long, widened posteriorly, conjointly rounded at the tip. Legs slender.

Length 2-2 $\frac{1}{10}$ mm.

Hab. JAVA (*ex coll. Bowring*).

Two females, received by the British Museum in 1863. A very small, narrow, shining, black insect, with slender antennæ and legs, and three longitudinally arranged whitish spots on each elytron, the latter closely, very finely punctate.

26. *Laius guttatus*.

♀. *Intybia guttata*, Pasc. Journ. Ent. ii. p. 448, t. 18, figs. 6 (1866).

Hab. BATCHIAN (*A. R. Wallace: Mus. Brit., Mus. Oxon.*).

The type of this species is in the British Museum, and there are three others in the Hope Museum at Oxford. They must be ♀ ♀, the greatly elongated thickened second antennal joint notwithstanding. Pascoe referred the genus to the Telephoridae. He omitted to note the absence of wings in his type, the rather short, posteriorly inflated elytra indicating the apterous condition of the insect. The elytra have each three white spots—one near the base and two placed transversely near the apex. The antennæ are rather stout, and the long, incrassate second joint shows no sign of sinuation, which is very marked in the ♂ of the nearly allied *L. carinifrons*, Pic.

27. *Laius borneensis*.

? *Laius borneensis*, Pic, L'Echange, xxvi. p. 83 (1910).

♂. Short, opaque, very finely pubescent; black, the anterior half of the head, the antennal joints 1-4 (the raised edge of 2 excepted), the tarsi (the fuscous apical joint excepted), the anterior femora, and the abdomen in part, testaceous, the elytra each with two rather large white spots on the disc—one below the base, transverse, the other

towards the apex, oblique; the surface very densely, finely punctate. Head triangular, canaliculate above; eyes moderately large, prominent; antennæ with joint 1 curved, much widened outwards, 2 extremely large, ear-shaped, simply concave within, and angularly produced at the proximal inner angle, which is furnished with a long, slender, curled appendage (Pl. VIII. fig. 19), 3-9 rather long, slender, filiform. Prothorax transverse, subcordate, as wide as the head, deeply, transversely excavate before the base. Elytra rather short, dilated and rounded at the sides posteriorly. Legs short, tarsi less than half the length of the tibiæ.

Length $2\frac{1}{2}$ mm.

Hab. BORNEO, Brunei (type of *Pic*: ♂), Sarawak (*A. R. Wallace, in Mus. Oxon.*: ♂).

In the Hope Museum there is a specimen from Sarawak that is perhaps referable to *L. borneensis*, *Pic*, the ♂ of which is diagnosed in a few words only in a table of Malayan forms with 4-spotted elytra. the only tangible characters given being the monstrous second antennal joint (third of *Pic*) without "fossette nette" towards the apex and the testaceous anterior portion of the head. The head is much smaller than in *L. guttatus*, *Pasc.*, and the antennal joints 3-10 are quite slender.

28. *Laius sarawakensis*, sp. n.

♂. Oblong, narrow, widened posteriorly, opaque, very finely pubescent; black, the elytra each with two whitish spots—one, large, transverse, below the base, not reaching the suture or outer margin, the other smaller, rounded, on the outer part of the disc towards the apex,—the sides of the metasternum, the anterior knees, the tarsi and abdomen in part, and the antennæ (the black apical joint excepted) testaceous; the upper surface densely, very finely, the under surface more sparsely, punctured, the head and prothorax slightly shining when the pubescence is removed. Head subtriangular, with a short longitudinal impression in the middle between the eyes, the latter moderately large, prominent; apical joint of maxillary palpi rather broad; antennæ long, comparatively stout, joint 1 much thickened, feebly curved, somewhat oval, slender at the base, 2 very broad and stout, oblong-oval, somewhat ear-shaped, excavate above, and with a long, straight, compressed appendage arising from near the base (Pl. VIII. fig. 20), 3 short, 4-9 a little longer than broad, 10 oval, stouter than and nearly twice as long as 9. Prothorax rather narrow, as long as broad, convex, sinuously

narrowed posteriorly, transversely, arcuately depressed before the base. Elytra moderately long. Metasternum convex in the middle. Legs rather stout, short, the posterior tarsi barely half the length of the tibiae. Wings ample.

Length $2\frac{1}{2}$ mm.

Hab. BORNEO, Mt. Matang, W. Sarawak, alt. 1000 ft. (*G. E. Bryant* : 17. i. 1914).

One male. Very near *L. 4-guttatus*, Er., the type, ♂, of which was found on the Island of Bintang, in the Gulf of Singapore, before 1840. The comparatively stout, testaceous antennae, with joint 10 only black, and 2 strongly appendiculate, and the wholly black head, sufficiently distinguish the present insect. It cannot be identified with any of the numerous Malayan species of the *Intybia*-group of *Laius* tabulated by Pic ('L'Echange,' xxvi. pp. 83, 84, 1910).

29. *Laius tetrastictus*, sp. n.

♀. Extremely like *L. sarawakensis*, but differing as follows: the two white or yellowish-white spots on each elytron shaped thus—one, near the suture below the base, large, narrowing outwards, the other transverse, large, on the disc towards the apex; head sharply canaliculate down the middle, the groove extending upwards on to the vertex; eyes a little larger; apical joint of maxillary palpi not so stout; antennae more slender, gradually tapering outwards, joints 2–5 in great part testaceous, 2 very stout, flattened-subcylindric (oblong-oval as seen in certain aspects), nearly as long as 3–5 united; legs black.

♀. *Var.* The subapical transverse spot reduced to a small streak.

Length $2\frac{3}{4}$ –3 mm.

Hab. BORNEO (*ex coll. Sharp* : var.), Quop in W. Sarawak (*G. E. Bryant* : 15. ii. and 19. iii. 1914).

Two specimens from Quop, precisely similar, and one of variety. It is scarcely possible that these insects are females of *L. sarawakensis*, the sharply canaliculate head and the relatively larger eyes forbidding such an association. The antennae are shaped almost as in *L. guttatus* (♀), as figured by Pascoe.

30. *Laius carinatifrons*.

Laius carinatifrons, Pic, Bull. Soc. Ent. Fr. 1910, p. 290 (♂ ♀).

♂. Head depressed in the middle, transversely carinate

on the vertex, and with a broad, dentiform, bifid elevation on each side near the prominent eyes, the transverse ridge preceded by a small Λ -shaped prominence; antennal joint 1 broad, curved, subtriangular, 2 (=3 of Pic) long, stout, hollowed on the outer aspect (Pl. VIII. fig. 21).

♀. Head unarmed; antennal joint 1 smaller, 2 not so stout, cylindrical.

Hab. JAVA (*Mus. Brit.*: ♂ ♀), Sukabumi (*types of Pic*).

A pair from the Bowring Collection, acquired by the British Museum in 1863, are certainly referable to this species. It is a narrow, opaque, bluish-black, densely punctured, pubescent insect, with black legs and antennæ, the ♂ with an extraordinary development of the head and antennæ. *L. diabolicus*, Pic (1905), from Sumatra, and *L. lombokanus*, Pic (1910), from Lombok, are allied forms.

Alphabetical numbered list of species of Laius enumerated in this paper; those marked with an asterisk are treated as new.

- | | |
|---------------------|--------------------|
| *birmanicus, 23. | plagiatus, 15. |
| borneensis, 27. | raffrayi, 18. |
| *boysi, 10. | *sarawakensis, 28. |
| *bulbifer, 4. | semilimbatus, 17. |
| carinatifrons, 30. | *sexsignatus, 25. |
| *denticornis, 5. | sinensis, 14. |
| *duplex, 24. | *taprobanus, 9. |
| externenotatus, 22. | *tetrastictus, 29. |
| flavicornis, F., 2. | tibialis, 3. |
| foveicornis, 16. | velutinus, 1. |
| guttatus, 26. | venustus, 19. |
| jucundus, 21. | |
| kiesenwetteri, 11. | |
| *lunatus, 8. | |
| luteofasciatus, 7. | |
| *malleifer, 20. | |
| niponicus, 13. | |
| *nodifrons, 6. | |
| pelegrini, 12. | |

SYNONYMS, VARIETIES, ETC.

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|--------------------------|
| 'flavicornis, Kies., 11. |
| histrio, 11. |
| kanarensis, 15. |
| maculithorax, 21. |
| rufolimbatus, 17. |

EXPLANATION OF PLATE VIII.

The figures 1-21 show the four basal joints of the ♂ antennæ, the second joint in 8 and 20 being turned partly backward to indicate the position of the basal appendage; 2*a*, ♂ anterior leg.